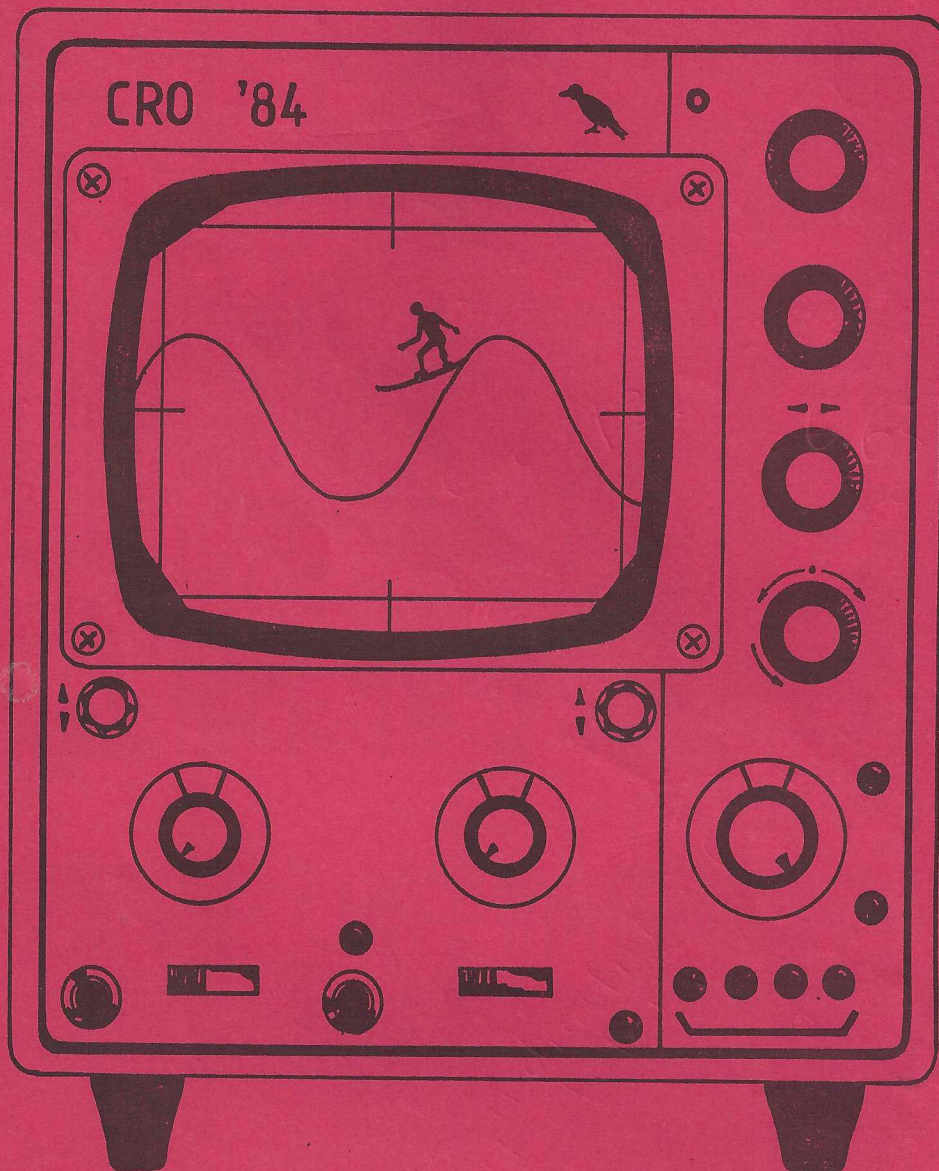


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The 1984 Annual Report
of the
Electrical Engineering Society
of the
University of New South Wales.

ELSOC

STUDENT SUBJECT EVALUATIONS

1983 - 1984

RESULTS

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CREDITS

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(*) The Regulars....bless their inkstained fingers

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NOTES

1. Aims of the Surveys

- i. To promote an environment in which students can critically discuss their course with staff
- ii. To provide students with some guide when choosing elective subjects
- iii. To provide lecturers with feedback to assist them in improving their subjects
- iv. To provide lecturers with a report on their teaching effectiveness for use in promotion or tenure applications

What these surveys do not do is address the broader issue of the "hidden curriculum", the notion that instead of training people for independent thought universities really train their students to accept the edicts and social values of the dominant social institutions. Rather than waste our efforts on an entrenched ideology, ELSOC worked where it could to improve the course; i.e. we accepted the course as it was and worked to improve the administration of individual subjects.

2. The Data

The most recent valid survey of each subject is included in this report. If a subject has been surveyed more than once then the results included here come from the survey with the largest sample size.

The data for the evaluations came from a machine readable questionnaire. This questionnaire was divided into questions on LECTURES, TUTORIALS AND FEEDBACK, LABORATORIES, GENERAL ASPECTS (in 1983) or OTHER ASPECTS (in 1984) and one question inviting a written comment. The resulting data was therefore in two parts, the machine readable questions and the written comments.

2.1 Machine Readable Questions

These were processed by the Educational Testing Centre. The ETC prepared tables on each subject containing the percent of students that strongly agreed/agreed/etc. to each question. These tables were summarised by finding the general pattern of student opinion in each section (lectures, tutorials, etc.) and then recording any exceptions to this general pattern. Final entries then read "Students rated this subject's (e.g.) Lectures as {GENERAL PATTERN} although {EXCEPTIONS}".

2.1.1 Finding The General Pattern

2.1.1.1 By Comparative Analysis The numerical statistics resulting from similar sections (e.g. Tutorials) were compared between subjects. Different techniques were used in each session of 1983. The General Pattern was recorded as

- (session one 1983) above average/ average/ below average
- (session two 1983) very high/ high/ middle/ low/ very low

The session one '83 technique was ELSOC's first attempt at popularising the statistics resulting from subject evaluations. The kindest thing we can say about it is that it was a fair first approximation. The session two '83 technique was far more sophisticated. It was based on a program called TESTAT supplied by the ETC. It is a standard comparative technique. However its results do appear slightly mysterious and some lecturers believed that the final summaries were not completely

connected to the initial data. Another technique was therefore used in 1984.

2.1.1.2 By Summary Questions Students were asked to rate each section. The 1984 results read "students rated (e.g.) Labs as very good/ good/ fair/ poor/ very poor although... (exceptions)".

2.2 Written Comments

These were summarised by one person reading through them all and noting the common (i.e. said by four or more people) written comments for each subject. The importance given to the written comments is a subjective judgement that the reader must make for themselves. Occasionally, when condensing these comments, we found that we were recording ideas that we thought were incorrect. Perhaps in the rush to write a comment, a student made one that did not fully express his/her viewpoint. One guide to the possible accuracy of a comment is the number of people that write it; the more people, the more likelihood that it is "true".

3. Patterns Of Student Ratings

The experience of the Teritary Education Research Centre (UNSW) is that certain subjects will always receive poor student ratings. We should expect subjects that are compulsory, that have large lecture classes, that teach lower year students, and that teach students from other schools (e.g. the service subjects we do in mathematics) to receive slightly low rankings.

Also, TERC experience shows that students tend to rate their subject slightly higher than they feel it actually deserves. When it comes down to it, people are basically too nice to point the finger and call a lecturer "very poor". In the light of this experience a low rating in any subject would seem to indicate a possible problem.

4. Deletions

Diplomatic and legal considerations convinced ELSOC not to publish certain sections of the results. These deletions are marked by {{_Deletion_}}.

But What Good Does It Do?

This is a fair question. Is ELSOC wasting its collective energy running around organising student subject evaluations? Why does ELSOC do it? There are several reasons.

ELSOC has seen several major subject revisions since the surveys began in 1983. Two in particular stand out. The 1983 surveys showed that students regarded Electronics One and Circuit Theory Two as major problem areas. The lecturing staff of both subjects was then reorganised. The 1984 survey for Circuit Theory Two was most encouraging. The lectures had undergone a marked improvement. Students gave that subject a very high rating. ELSOC is looking forward to a good result in Electronics One this session as super-lecturer Dr. Henry Fooks (of Circuit Theory One fame) will be taking this subject.

Solid State Physics has been a problem subject for students for as long as anyone can remember. Due entirely to these surveys, this may soon change (see the subject entry for 1.982 for details).

There are many other examples of lecturers who changed their subject's organisation because of the surveys. For example, Dr. Horwitz has introduced tutorials to Electronics Two as a direct result of student feedback. The lecturers are usually more than glad to correct the problems that these surveys discover. Many welcome the feedback the surveys provide, saying that they rarely get student feedback from other sources.

The school's administration encourages us. The impression ELSOC gets is that they want the information we can provide but the internal politics of academics prevents them from collecting it for

themselves. ELSOC has often turned to our head of school for help and advice about problem subjects and problem staff members. This head of school encourages staff to use the ELSOC surveys when making applications for promotion. He also agreed to the school paying for the printing of this report. He justified the cost by saying "these surveys are good for morale". The chairman of the school's academic executive originally suggested we use machine readable survey forms thus making possible the whole survey program. These administrators have actually reorganised the lecturing staff to resolve problems with certain lecturers (e.g. 6.0311 and 6.021c as mentioned above).

What the surveys can't do is solve the problems you are having right now with your subjects. By the time ELSOC collects and processes the data, the session is over. ELSOC then acts on the results to try and stop your problems from being the problems for the people who do the subject next time.

So, you may ask, if I have a problem what should I do? Since you are familiar with the problem and have the greatest motivation to fix it, and since you see the person who runs your subject at least twice a week (i.e. your lecturer), then you are perfectly qualified to chase up the problem for yourself. This you should do as quickly as you can. It is no good procrastinating till week ten when you saw the problem in week four. Do not be scared to approach the lecturers. They have all lived with the ELSOC surveys for over a year now. They all know that their subject will be evaluated at regular intervals and that the results from that evaluation will be published. It is in your lecturer's own self-interest to listen to your complaints and act on them.

If you do have a complaint then you should discuss it with your friends. Specifically identify the problem and the possible solutions. Ask ELSOC for advice. Make an appointment to see the lecturer outside lecture time and then

go in a group to see him. If you are unsatisfied with his response, go to his superior and if unsatisfied there, go higher. The chain of command is lecturer/head of department/head of school. Our head of school is Prof. Neville Rees and is a very useful and reasonable man to talk to.

ELSOC SURVEY ROSTER

1984

Session Two

| | | |
|---------|---------|---------|
| 1.961, | 1.972, | 5.056, |
| 6.010, | 6.021c, | 6.021e, |
| 6.0315, | 6.0316, | 6.0317, |
| 6.322, | 6.333, | 6.652, |
| 6.641, | 6.643, | 6.633, |
| 10.361, | 10.033, | |

1985

Session One

| | | |
|---------|---------|---------|
| 1.982, | 6.021a, | 6.0313, |
| 6.0318, | 6.222, | 6.303, |
| 6.323, | 6.432, | 6.512, |
| 6.607a, | 6.612, | 6.622, |
| 10.033, | 10.361, | |

Session Two

| | | |
|---------|---------|---------|
| 6.021b, | 6.0314, | 6.041, |
| 6.203, | 6.413, | 6.607b, |
| 6.611 | | |

1986

Session One

| | | |
|--------|---------|--------|
| 6.042, | 6.0312, | 6.202, |
| 6.303 | | |

Session Two

| | | |
|--------|--------|--------|
| 6.044, | 6.045, | 6.212, |
| 6.483 | | |

1987

Session One

| | | |
|--------|---------|---------|
| 5.006, | 6.021d, | 6.0311, |
| 6.412, | 6.532, | 6.672 |

* * * *

The roster surveys each subject on a three year rotation basis. This saves ELSOC's collective manpower resources. As well as the above, subjects will be surveyed if Students or Lecturers request a survey; the subject had a poor rating in last years evaluations; or the subject is a new subject, or is a subject that has been substantially reorganised.

1.961 PHYSICS 1 /Session Two 1983

This is a first year core subject run as a service subject exclusively for Electrical Engineers. There were approximately 200 students enrolled of which 86 returned survey forms (86/200 = 42%).

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS, TUTORIALS and FEEDBACK, Dr. J. Box's LECTURES as low, although 86 students always or usually attended tutorials; LABORATORIES were rated very low.

Out of the students who completed the survey forms 5 complained about the textbook; 9 found it hard to hear the lecturer; 17 found the lectures disorganized; 19 complained about the lack of demonstrators in the laboratories; 4 thought the tutors could be better and that there should have been printed tutorial solutions.

ELSOC notes that in 1982 we complained to Dr. G. Russell (Director, First Year Studies - school of physics) about the 1.961 labs. We approached Dr. Russell again in Feb. 1984 and he says that there will be more lab demonstrators in 1984 but, due to financial restrictions, this may still not be sufficient.

1.961 PHYSICS I (ELEC ENG)/Session One 1984

This is a compulsory first year subject run as a servicing course by the school of physics. When it was last surveyed by ELSOC (session II 1983) students gave the subject a low rating overall and a very low rating to labs.

Particular complaints included the lack of demonstrators and printed tutorial solutions.

Of the 136 students enrolled in this session, 95 returned survey forms to ELSOC. This represented a 70% response rate. Students rated:

- LECTURES

1. Dr. J. Pope : good to very good.
2. Dr. G. J. Russell : good, although 59% of students thought the lecturer spoke too quickly or indistinctly.

- TUTORIALS AND FEEDBACK as good to fair.

- LABORATORIES - mixed response - good 21%; fair 36%; poor 17%; very poor 19%. 70 students complained it was hard to finish experiments in the allotted time and often experiments were hard because they were based on material not covered in lectures.

- OTHER ASPECTS as fair to good. 46 students stated that this subject made excessive demands outside of class time.

Written Comments: Of the 95 students who completed the survey forms

26 complained that the laboratories were extremely rushed, too much work was expected to be completed in a limited period, and the long queues to see demonstrators made matters worse. Too much pressure was put on completing labs, and not enough on actual learning.

8 complained that examples were at times confusing as the mathematics was beyond their level of understanding.

6 said that Dr. Russell was a good lecturer and presented his material well

6 complained that the tutorials often got bogged down on 1 or 2 problems and requested printed tutorial solutions.

ELSOC adds two comments to this entry:

1. The result for Dr. Pope is most remarkable. As stated in the introductory notes to this report, first year compulsory service subjects with large lecture classes (e.g. this subject) do not normally get favourable student ratings. Dr. Pope is to be congratulated.

2. This subject's labs are a long standing problem. First year students, new to university and anxious to do the best they can, find the lab queues frustrating. As in 1982 and 1983 ELSOC again discussed this subject's labs with Dr. Russell. He told us that the number of labs and the length of the prep for each lab was gradually being reduced. ELSOC examined lab notes from 1982 and compared them with 1984 lab notes. We could find no significant differences. ELSOC wrote to Dr. Russell, protesting at being lied to. The Head of the School of Physics replied to out letter and apologised for what apparently was an misunderstanding between Dr. Russell and the lab staff. Dr. Russell believes that currently there are enough lab demonstrators. He recommends that students prepare more than one lab ahead at a time. If they did this, he says, students could use the entire 2 hour lab time and not leave early if they finish the one lab they did prepare. If they did this, he went on to say, students would be queueing to see the demonstrators throughout the lab and not only at the start and finish of the lab period. ELSOC will discuss these labs further with Physics, but first we will attempt to resolve the problems with 1.982.

1.972 ELECTROMAGNETISM /Session Two 1983

This is a second year core subject. It is run for full time students in session two. Number of enrolled students was 180; 113 survey forms were returned to

ELSOC. 113/180 = 63%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as low, although this subject did not make excessive demands on students outside of class time; Dr. J. Middleton's LECTURES as middle; TUTORIALS and FEEDBACK as low, although doing the set tutorial questions increased students comprehension of the subject; LABORATORIES as low, although students thought that they weren't too hard or too long.

Of the 113 students who completed the survey 10 wrote that the labs were irrelevant, a waste of time, and that they need revision. 4 students said that the tutorial classes should be weekly to give students enough time to solve problems. 5 students claimed that this subject was not necessary since its material was covered by other subjects.

Many students commented on the lectures. 18 said that Dr. Middleton was a good lecturer (though tells bad jokes), and that he gives good notes. 8 commented that it was hard to read his writing. 5 said that he gave too many notes, and 5 said that the lectures were just a rehash of the textbook. 5 students requested that the lectures run for the full 50 minutes.

1.982 SOLID STATE PHYSICS /Session One 1984

This is a second year compulsory subject run as a service course by the School of Physics. It has not been previously surveyed by ELSOC.

Of the 150 students enrolled in this session, 130 returned survey forms to ELSOC. This represented an 87 % response rate. Students rated:

- LECTURES

1. A/Prof Bowden: mixed response, fair to poor. 103 students complained that there was too much material covered in each lecture. 77 students complained

that the lecturer did not make good use of examples.

2. Dr. G. J. Russell : good -15%, fair -32%, poor -21%. Only 27% of students agreed that the lecturer made good use of examples. 51% of student thought that the lecturer was "unable too explain things in a way that satisfied me" while only 21% agreed that they were satisfied with the lecturer's explanations. 67% of students thought that there was too much material covered in each lecture.

- TUTORIALS AND FEEDBACK - mixed response: good 25%; fair 33%; poor 30%. In particular, complaints were made about lack of feedback and a difficulty to gauge progress in the subject.

- LABORATORIES - fair to good

- OTHER ASPECTS - fair to poor. In particular: 96 complaints about the texts

Written Comments: Of the 130 students who completed the survey forms

- 19 said that 10.2112 should be a prerequisite
- 8 complained that Dr Bowden covered material too quickly
- 6 requested more examples in lectures
- 5 complained that Dr Russell spoke and wrote too quickly

ELSOC's discussions on this subject revealed that this subject's content has not been revised since the subject began in 1979. Since it was possible that the Electrical Engineering undergraduate course has changed since then, we asked the head of our semi-conductor centre to study the content of 1.982 and rate the relevance of the various sections to undergraduates. Prof. Rigby's ratings were WAVES & PARTICLES :medium; SCHRÖDINGER'S THEORY :low; SOLUTIONS OF WAVE EQUATION :medium; ATOMIC STRUCTURES :low; MULTI-ELECTRON ATOMS :low; STRUCTURAL PROPERTIES :medium; BAND THEORY :high; SEMICONDUCTORS :high;

EXCESS CARRIERS high. In light of these ratings, a review of 1.982 would seem reasonable. ELSOC will discuss this with Physics.

5.006 ENGINEERING E/Session One 1984

This is a compulsory first year subject. It has not been previously surveyed by ELSOC.

Of the 170 students enrolled in this session, 95 returned survey forms to ELSOC. This represented a 56% response rate. Students rated:

- LECTURES by both Dr.J. Challen and Mr.G. Crawford as fair.
- TUTORIALS AND FEEDBACK as fair to poor.
- OTHER ASPECTS as fair. Half the students complained that the subject was not relevant to their future career. 60 students complained that the amount of work required was out of proportion to the importance of the subject.

Written Comments:Of the 95 students who completed the survey forms

- 18 complained that Dr. Challen's lectures were too long and slow.
- 11 requested improvements to the course to make it more useful and interesting.
- 6 complained that the tut questions were too numerous, too hard.
- 5 students commented on Dr. Challen's lack of control of the lecture class and the time wasted due to paper aeroplane throwers.
- 5 asked for more appropriate examples in Dr. Crawford's lectures.
- 5 found the films entertaining and interesting.
- 4 complained that Dr. Crawford's lectures were boring.
- 4 people felt that the only way to survive lectures was to make and launch paper aeroplanes.

Mr. Crawford comments : Both Dr. Challen and myself are concerned and receptive

to sensible suggestions for improvements. Dr. Challen has gone to a lot of trouble to prepare elaborate models and transparencies for his lectures on drawing and he does have penchant for detailed drawings and descriptions which can be irritating to those who are familiar with the material. However, those students meeting drawing concepts for the first time must be considered.

He probably could afford to move more quickly through the material and rely on the tutorials to help those with specific problems.

I asked students to read the textbook for themselves and then tried to highlight important issues and provide supplementary material & examples using films and case studies. It is disappointing to find that students do not study the text in pace with the lectures.

The difficulty is that this subject requires students to think not just to regurgitate facts and standard techniques as they did at school and for their other first year subjects.

In session two I will be organising the work programme and I will issue the projects in week one and then use them to illustrate the various phases of the design strategy as we go through it. I feel this will be more effective and useful for students.

It would help if ELSOC deplored the small groups of students who disrupt classes by juvenile behaviour making paper aeroplanes, these are dangerous missiles that could damage a person's eye. Dr. Challen attempted to control this but it is very difficult to do in large classes at university where there is not quite the same disciplinary arsenal available. I tried to disregard them and talk to the serious groups of students but we were all seriously distracted. Any ideas on how to reduce this problem would be appreciated !

I have found the survey comments useful and feel that my presentation did improve towards the end of the session after the survey was made and we had that brief in-class discussion when the survey was conducted. Many thanks.

6.010 ELECTRICAL ENGINEERING I /Session Two 1983

This is a first year core subject run for full time students in session two. It has not been surveyed previously by ELSOC. Of the 168 students enrolled in the subject, 78 survey forms were returned to ELSOC. 78/168 = 46%

Compared with every other subject surveyed, students rated ALL ASPECTS as low, although 68 students agreed that this subject was clearly relevant to their future career.

12 students wrote complaints about the tutorial organisation; apparently the tutorials were mostly spent marking the set tutorial questions and no time was left for students to ask other questions. 7 students wrote that the subject content was too extensive.

{{ Deletion }}

ELSOC notes that

- i. 50 students marked their survey forms agreeing and strongly agreeing with the statement "The scope of this subject is too wide for effective study." N.B. 50/78 = 64%
- ii. 6.010 is a first year, compulsory subject with large lecture classes. It should be routinely expected that such a subject should receive a comparatively low student rating.

{{ Deletion }}

The lecturer Prof. Donaldson comments : The 1983 Electrical Engineering 1 students have been an excellent group to work with. Staff members wish to express their appreciation of their interest and good behaviour. Student

feedback is welcomed.

6.021a Circuit Theory One /Session One 1983

This is a second year compulsory subject. Of the 173 students enrolled in this session, 133 returned survey forms to ELSOC. This represents a 77% response rate.

Comparative student ratings were:

- LECTURES : (Dr. E. H. Fooks) above average
- TUTORIALS : above average
- LABORATORIES : average
- SUBJECT IN GENERAL : above average
- TEXTBOOKS : below average
- ASSESSMENT METHOD : above average

Common Written Comments:

- Lecturer and lectures were excellent. Tutors and tutorials acceptable(15).
- Assessment was thought to be very good although many students expressed dissatisfaction with the scaling of marks in test two(10).
- Two very conflicting comments on the textbook
 - Many said that it was too expensive and never used due to the excellent lecture notes.
 - Expensive, however found it useful with many examples
- Marks should be applied to the laboratory work, which should also be concurrent with lectures(8).
- This subject should be before 6.010 or 6.010 should be abolished due to irrelevance(4).

6.021b POWER /Session Two 1983

This is a second year core subject run for full time students in session two. 52 students out of the 140 enrolled returned ELSOC survey forms. Response rate was 52/140 = 37%

Compared with every other subject surveyed, students rated this subject's TUTORIALS and FEEDBACK and ASSIGNMENTS as very high; LABORATORIES as high; GENERAL ASPECTS and Mr. H. Harrison's LECTURES as middle.

8 students praised the use of printed lecture notes. A common view expressed was that the subject was well organised and that worked examples presented were excellent.

Mr. Harrison had several criticisms about the ELSOC surveys. They were that incorrect ratings had been given to his subject; that the comparison technique used to rate subject aspects was invalid; that mid-session open discussions between students and staff would be a better way for lecturers to get student feedback because this would occur in time for subject revision in that session; and that the written comments were, in some cases, "pornographically distasteful to the extreme". ELSOC checked the ratings given to 6.021b and found one clerical error. The entry was then corrected before the results were circulated. ELSOC would defend its comparative analysis on many grounds but the bottom line is that it seems to work. Subjects receive ratings that are consistent with the opinions expressed by students "on the grapevine". The students' grapevine is hardly an objective basis for subject evaluation. This is why ELSOC chooses to use the machine readable forms. This is also why, though we like Mr. Harrison's suggestion for mid-session discussions (and we will attempt to organise them in 1984), we will continue to use the machine readable forms distributed at the end-of-session. As to the bad taste written comments, the surveys were conducted very late in session two 1983. Education researchers warned ELSOC that the spectre of final assessment tends to distort students' perspective. A better time to survey would be before this spectre looms, e.g. week 11. This will be done in future.

ELSOC would like to thank Mr. Harrison for his comments. They encouraged a

useful review of survey procedure and suggested significant improvements for the 1984 surveys.

6.021c ELECTRONICS 1 /Session Two 1983

This is a second year core subject, normally taken by full time students in second session. 109 of the 170 students enrolled in session two 1983 returned ELSOC survey forms. Response rate was $109/170 = 64\%$

Compared with every other subject surveyed, students rated EVERY ASPECT of this subject as very low.

This subject had a remarkable number of written comments; some 10 typed pages of primarily negative comments. 80 students agreed that Dr. H. S. Blanks presents LECTURES badly; explanations were inadequate, diagrams were not followed by explanations, and worked examples were few. Students found it hard to understand the lecturer or to read his small print.

27 students complained about the LABORATORIES; they said that they were hard because they were based on material not yet covered in lectures. Also the reports were slow in being marked, were returned lacking comments, and similar quality reports were given a wide range of marks by different markers.

25 students complained about the TUTORIALS. According to the students the tutors {{Deletion}} did not explain or solve the problems before the class but simply reread the solved solutions available in the library.

ELSOC notes that in future Dr. Henry Fooks (who is a little bored with teaching Circuit Theory 1 after all these years) will be teaching the session two 6.021c class.

6.021d COMPUTING/Session One 1984

This is a compulsory second year subject. It was last surveyed by ELSOC in session I, 1983, when students gave the subject an overall below average

rating. In particular, students complained of the low weighting of assignments, the system's frequent breakdowns, and asked for more tutorial solutions. Dr Clements noted these comments and pointed out that the unit had just been restructured, that some of the material was new to him, and that the class was very large. Assignments already had the maximum allowed weighting and, in future, all solutions would be provided.

Of the 170 students enrolled in this session, 135 returned survey forms to ELSOC. This represented a 79% response rate. Students rated:

- LECTURES(Dr.D.Clements) as fair to good.
- TUTORIALS AND FEEDBACK as Good 27%, Fair 28%, Poor 22%.
- LABORATORIES Not Applicable
- OTHER ASPECTS as fair. 99 students said the subject made excessive demands of them outside class time.

Written Comments:Of the 135 students who completed the survey forms

- 17 complained about the handouts on assignments; in particular that they didn't give enough information and were ambiguous.
- 11 complained about the assignments being worth too small a percentage of the assessment considering the work involved.
- 10 complained about the lack of constructive feedback from tutorial questions.
- 6 asked for clearly defined exam-type questions in lectures in order to explain programming to students.
- 5 complained that some tutors did not have a functional grasp of all the subject matter.
- 4 stated that there was a need for a text for certain sections of the course e.g. shell programming.

ELSOC notes that Dr.Clements is to be commended for the apparent improvement

in this subject's organisation since 1983. However, problems with assignments still remain.

6.021e DIGITAL LOGIC AND SYSTEMS /Session Two 1983

This is a second year core subject, forming part of the second session full time programme. Of the 160 enrolled students, 104 participated in the ELSOC survey. Response rate was $104/160 = 65\%$

Compared with every other subject surveyed, students rated Dr. W. Dewar's LECTURES, TUTORIALS and FEEDBACK as very low; GENERAL ASPECTS and LABORATORIES as low, although 87 students agreed that lab classes were useful.

52 students thought Dr. Dewar lectured too rapidly, with little continuity, organisation or headings as well as having indecipherable writing. 15 students felt that Dr. Dewar assumed knowledge students did not have. 5 students commented on Dr. Dewar's habit of smoking in "No Smoking" areas such as the lecture theatre, lab and tut rooms. 5 students wanted a syllabus to determine the subject matter because the lectures left this in doubt. 22 students felt that tutorials were useless because of irrelevant questions and lack of printed solutions; they said that some tutors could not even answer the tutorial questions, and seemed to miss some of the tutorials. 11 students expressed a desire for decreased laboratory work load with respect to length of experiments and time required to write them up. They also wanted the marks associated with the laboratories increased. 6 students said that Millman was a good text.

Dr. Dewar comments I admit that Digital Logic had some problems. Other subjects requiring a broader, more complete knowledge took the more experienced academic staff. This lead to problems with laboratory and tutorial assistance but the labs were always marked within one week. This year I had a large lecture class and that always means a lower student rating. Still, I

don't agree with some of the students comments. Some tutorial solutions were posted in the labs. I don't show them all because then students would never do the tuts. I do not agree that the tutorial questions were irrelevant to the exams. Also, if students came to lectures better prepared then they would not be so dependent upon copying down my board notes. The blackboard in LG-1 is of such a poor design that, if you print on it, it makes a lot of noise. To stop that I had to use my, somewhat messier, writing.

I will act on some of the students comments. In 1984 I will reduce the overall lecture content and concentrate more on the important material. The marks given to labs will be increased to the maximum allowable level, i.e. 20% (set by the school authorities). I will use another textbook in 1984 and suggest some tutorial questions from that text. It has some answers and solutions in the back.

6.0311 CIRCUIT THEORY II/Session One 1984

This is a third year compulsory subject. It was last surveyed by ELSOC in session one 1983 when students gave the subject a generally low rating. In particular, students criticized the weighting given to, and the standard of, the exams as well as the quality of the lectures. Since then there has been changes in the lecturing staff of this subject.

Of the 130 students enrolled in this session, 95 returned survey forms to ELSOC. This represented a 73 % response rate. Students rated:

- LECTURES(A/Prof.T.Vu) as good. In particular 87 students thought that the lecturer made good use of examples and that his material was well organised.
- TUTORIALS AND FEEDBACK - as good. 73 students agreed that tutorial feedback was good.

- OTHER ASPECTS - as fair to good

Written Comments: Of the 95 students who completed the survey forms

- 19 said that Dr Vu's lecture notes were excellent and well organised.
- 17 complained about the speed at which the lecturer covered the material. They requested printed notes so that they could listen to Dr Vu's explanations instead of just copying the material down.
- 9 complained of Dr Vu's use of the microphone and that his voice was inaudible and difficult to understand.
- 5 commented on the lecturer's good use of examples.

Prof. Vu comments : I agree that a better P.A. system is required. The microphone went dead many times during each lecture.

ELSOC notes that after the session one 1983 surveys it seemed that Circuit Theory II was a major problem area. This is no longer the case. Prof. Vu informs us that he is very pleased with the exam results from 6.0311 this session. This indicates that the students not only were happy with the subjects administration (as suggested by the survey results) but also grasped the subject content as well. Prof. Vu is to be commended for the improvement in this subject's administration.

6.0312 Utilisation of Electrical Energy /Session One 1983

This is a third year compulsory subject. Of the 144 students enrolled in this session, 101 returned forms to ELSOC. This represents a 70% response rate.

Comparative student ratings were:

- LECTURES : (Dr C. Grantham) above average
- TUTORIALS : average
- LABORATORIES : above average to average

- SUBJECT IN GENERAL : above average, but some students doubted if this subject is relevant to their future career.

- TEXTBOOKS : below average

- ASSESSMENT METHOD : above average

Common Written Comments :

- The textbook is not worthwhile (6).
- The lecture notes provided were very useful (7).
- Dr Grantham is a good lecturer (5).
- More worked examples should be included in lectures (8).
- Worked answers should be provided to tutorial problems (6). (The lecturer writes that solutions are in open reserve.)

6.0313 ELECTRONICS II/Session One 1984

This is a compulsory third year subject. When previously surveyed in Session 1 and Session 2, 1983 the students complained of inadequate explanation of laboratories being given in lectures.

Of the 160 students enrolled in this session, 88 returned survey forms to ELSOC. This represented a 55% response rate. Students rated

- LECTURES(Dr.C.Horwitz) as Good 22%, Fair 31%, Poor 31%. 50 students thought the lecturer didn't make good use of examples.
- LABORATORIES Good 20%, Fair 32%, Poor 26%. 80 students felt that it was hard to finish laboratories and that the experiments were hard because the work hadn't been covered in lectures.

- OTHER ASPECTS as fair to poor. 74 students thought that the text books were not very useful.

Written Comments: Of the 160 students who completed the survey forms

- 29 complained about lack of tutorials.
- 12 complained of insufficient examples

and not enough relation to labs in the lectures.

- 12 complained of complicated laboratories and lack of explanation about them in lectures.
- 9 complained of the lack of laboratory demonstrators.
- 9 complained of the excessive time spent on the laboratories.
- 9 complained that Dr. Horwitz seemed disinterested in the students and their progress.
- 8 complained that there was too much material in the course.
- 4 complained of the laboratories being too crowded.

Dr. Horwitz comments : I think the students' response to the lack of tutorials and increased new lab work is understandable. Next session both of these problems will be addressed: one in four lectures will be a tutorial, and the lab work will be cut down to a lower level.

6.0314 SYSTEMS AND CONTROL I /Session Two 1983

This is a third year core subject run for full time students in second session. Out of the 118 students enrolled 70 returned survey forms (70/118 = 59%).

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as high, although students found the textbook and reference book lists inadequate; Dr. R. Brown's LECTURES as high; LABORATORIES as low; TUTORIALS and FEEDBACK as middle.

15 students wrote that Dr. Brown was a better than average lecturer and tutor. 12 students said that the subject matter was difficult but the lecturer did his most to help. 5 students commented on the inadequacy of the textbook (especially since the lecturer used slightly different notation and methods). 8 students commented that the laboratories did not relate to the course, and found them badly organized.

6.0315 ELECTRICAL ENERGY/ Session Two 1983

This is a third year core subject run for full time students in second session. Of the 205 students enrolled, 119 returned survey forms to ELSOC. 119/205 = 58%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS, TUTORIALS and FEEDBACK, and Dr. T. B. Blackburn's LECTURES as low, although 101 students thought that by doing the set of tutorial questions their understanding of the subject was increased; LABORATORIES as middle.

18 students wrote that Dr. Blackburn did his best with a subject they found boring. 7 students commented about how hard it was to concentrate through 4 hours of lectures, the last two of which were 6.0315.

Dr. Blackburn comments : There are some comments by students that should be answered. With regard to laboratory reports, I asked for reports on two experiments: the reports were to be "detailed technical reports of the experiment". I was amazed by the number of students who did not seem to understand what was meant by a detailed technical report. If my request for a "detailed technical report" was "vague", then it was so because detailed technical report writing is a task that should be second nature to students at the end of third year. As this is apparently not the case, and in view of the very poor standard of the laboratory books, the laboratory assessment in 6.0315 will be changed in 1984 with reports required for all experiments instead of only two. It has become apparent from the survey and my reading of the laboratory books that students have been putting less than the required effort into the laboratories because the assessment allows them to. The laboratory is an essential part of the course and will be monitored more stringently in 1984.

A textbook and a recommended reference book have already been perscribed for 1984.

It would appear from the comments that many students were dissatisfied with the timetabling of 6.0315 (this dissatisfaction was shared by the lecturer) and this was the basis for a number of adverse comments. Steps have already been taken to remove 6.0315 from that slot and to revert to two one hour lectures on different days in 1984. While I cannot guarantee that this will make the lectures less boring, in accord with the apparent wishes of the class I will endeavour to smile a little more often.

6.0316 ELECTRONICS III/ Session Two 1983

This is a third year core subject run for full time students in session two. Out of the 125 students enrolled, 71 returned their forms (71/125 = 57%).

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS, LABORATORIES, Prof. W. Holmes' LECTURES, and TUTORIALS and FEEDBACK as very low, however 49 students agreed that the labs were useful.

8 Students wrote complaining about the lack of feedback in the form of marks until late in the session. 19 wrote that the lectures were disorganized and his writing was hard to read. 17 students were highly critical of the way the subject was presented and run. 8 students suggested that coherent blackboard notes and quicker marking of lab reports would improve the subject.

ELSOC discussed these results with Prof. Holmes. He was dissatisfied with the 1983 surveys. He said that since students have to complete so many survey forms each session that they are not taking them seriously. This can be seen, he says, in the multiple offensive written comments made by students which lack any constructive intent. The sample size was so small that the group of 20 to 30 students that attended each

lecture and (so Prof. Holmes says) paid no attention at all dominated the survey results.

In 1984 ELSOC plans to survey only half the subjects surveyed in 1983 (and the rest on a rotation roster in the following years). This will mean that students will do only half the number of surveys than they did in '83. ELSOC admits to an administrative mistake in the session two 1983 surveys. They were conducted very late in session when the spectre of final assessment overrides students' judgement. Future surveys will be conducted in week 11 and it is predicted that less of the offensive written comments will occur.

(Note This prediction was confirmed in 1984)

6.0317 COMMUNICATION SYSTEMS I/ Session Two 1983

This is a 3rd year core subject. It is run for full time students in second session. Number of enrolled students was 220 and the number of survey forms returned was 130, making for a 59% response.

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as middle; Prof. I. Korn's LECTURES as very low; Dr. C. J. E. Phillips' LECTURES as high; LABORATORIES as very high; TUTORIALS and FEEDBACK as low.

Of the 130 students who completed the survey forms, 6 made complaints about the way in which the mid-session test was marked, 7 complained about Prof. Korn's lecturing with 7 students claiming he was too fast and 8 students claiming his accent made him hard to understand, (but 3 students said that he had improved since he'd lectured them back in 6.0311). {{ Deletion }} 6 students noted that compulsory labs gave no marks and 8 students wrote that Dr. Phillips is a good lecturer.

6.0318 MICRO-PROCESSOR SYSTEMS AND APPLICATIONS/ Session Two 1983

This is a third year core subject run for full time students in first session. It was surveyed in October 1983. 120 students were enrolled in the subject and 79 forms were returned to ELSOC. 79/120 = 66%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as high; Dr. P.G. McCrea's LECTURES, TUTORIALS and FEEDBACK, and LABORATORIES as middle.

Of the 79 students who filled out the survey forms, 5 wrote that the lectures were good.

6.041 ELECTRICAL MEASUREMENTS /Session Two 1983

This is a fourth year elective subject run for full time students in session two. 14 students are enrolled in the subject; 6 survey forms were returned to ELSOC. 6/14 = 43%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS, LABORATORIES, and TUTORIALS and FEEDBACK as middle; Mr. J.R. Kinard's LECTURES as high; ASSIGNMENTS as very high.

There were no common written comments.

6.042 Digital and Analogue Systems /Session One 1983

This is a fourth year elective subject. Of the 80 students enrolled in this session, 58 returned forms to ELSOC.

Comparative student ratings were:

- LECTURES : (Dr C.J.E. Phillips) above average
- TUTORIALS : average
- SUBJECT IN GENERAL : average to above average

- TEXTBOOKS : average
- ASSESSMENT METHOD : above average

Common Written Comments :

- Lecturer was well liked by students as a lecturer and tutor. (7)

6.044 ELECTRICAL PRODUCT AND DESIGN RELIABILITY/ Session Two 1983

This is fourth year elective subject run for full time students in session two. There were 55 students enrolled and 21 survey forms were returned to ELSOC. 21/55 = 38%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as very high; ASSIGNMENTS and TUTORIALS and FEEDBACK as high; Dr. H.S. Blanks' LECTURES as low.

4 Students wrote that the subject was dull, but gave a good insight into the design procedure.

ELSOC notes that Dr. Blanks was puzzled by the rating given to his lectures. He informs us that the lecture content of 6.044 has won him international acclaim, that he has been invited overseas to repeat lectures he wrote for 6.044, and that fourth year undergraduates have been promised employment by overseas companies chiefly because they were doing this subject. ELSOC pointed out to Dr. Blanks that undergraduate electrical engineers do not have the experience to effectively evaluate lecture content. Instead, they can effectively evaluate the extent to which lectures help them to learn that content. Dr. Blanks told us that he feels that students should look beyond lecture presentation and look at the subject matter and how students themselves can enlarge their own understanding of the subject by further reading. Dr. Blanks also believes that, unfortunately, the class contains some students who only selected 6.044 because it was one of the limited number of electives offered in session two.

6.202 Power Engineering Systems 1 /Session One 1983

This is a fourth year elective subject. Of the 45 students enrolled in this session, 44 returned forms to ELSOC. This represents a 98% response rate.

Comparative student ratings were:

- LECTURES : (Dr H.R. Outhred) average to above average
- TUTORIALS : above average
- LABORATORIES : average to above average
- SUBJECT IN GENERAL : above average
- TEXTBOOKS : above average
- ASSESSMENT METHOD : average

Common Written Comments :

- Midsession test wanted. (10)
- More examples in lecture notes needed. (4)

Lecturers Comment : There will be a midsession test for 1984.

6.203 POWER ENGINEERING/ Session Two 1983

This is a fourth year elective subject taught to full time students in session two. Of the 23 students enrolled in this subject, 13 survey forms were returned to ELSOC. 13/25 = 52%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as high; TUTORIALS and FEEDBACK: middle; Dr. S. Sutanto's LECTURES and ASSIGNMENTS as low.

There were no common written comments.

6.212 POWER ENGINEERING UTILISATION/ Session Two 1983

This is a fourth year elective subject run for full time students in session

two. Of the 22 students enrolled in the subject 19 returned survey forms to ELSOC. 19/22 = 86%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS and Dr. C. Grantham's LECTURES as very high; ASSIGNMENTS, TUTORIALS and FEEDBACK, and LABORATORIES as high, although 14 students agreed that it was hard to finish the allotted number of labs.

Of the 19 survey forms returned to ELSOC, 5 students said that Dr. Grantham is an excellent lecturer, presents hard material well. 4 students said that the mid-session test should be included to give students a guide to their performance and to place less emphasis on the final mark.

6.222 High Voltage Technology /Session One 1983

This is a fourth year elective subject. Of the 36 students enrolled in this session, 29 returned forms to ELSOC. This represents an 80% response rate.

Comparative student ratings were:

- LECTURES : (Dr R.E. James) below average
- TUTORIALS : above average
- LABORATORIES : average to above average
- SUBJECT IN GENERAL : average but some students thought that work was unnecessarily repeated from other subjects and half doubted if this subject was relevant to their future careers.
- TEXTBOOKS : above average
- ASSESSMENT METHOD : above average

Common Written Comments :

- Lectures disorganised - hard to follow. (5)

Lecturer's Comment : The subject matter had to be doubled at short notice as Dr Blackburn was transferred to other work. This led to problems in getting material copied in time. In addition there was the problem of trying to integrate work for postgraduate as well as undergraduate students.

I suspect that a number of students had not read the syllabus closely. It is intended as a practical subject based on academic principles and is the type of engineering they will meet in real life. I suggest that if students go into the power supply industry they will find this course very relevant.

Also, not as an excuse, but as a part explanation, I was ill throughout session but was determined to finish the course and not let down the students.

I am very disappointed with the comments made regarding this subject but will take note and make changes to improve the course and lecturing. In particular -

1. I have taken note of the various comments and was planning to change a number of aspects. e.g. arrange visits to industry at the beginning of the course and add more theory assuming the majority have not completed the same.
2. I shall have much more time to prepare next year, in particular with respect to presenting two hour lectures.
3. I shall emphasise the common thread even more - I did point out such a factor this year.
4. The handbook entry for 1984 has been modified.

6.303 HIGH FREQUENCY CIRCUITS AND ELECTRONICS I Dr. Chu/Session One 1984

This is a fourth year professional elective. Dr. Chu's Section of 6.303 has not been previously surveyed by ELSOC.

Of the 58 students enrolled in this session, 43 returned survey forms to ELSOC. This represented a 74 % response rate. Students rated:

- LECTURES as good and in particular 41 students thought that the lecturer made good use of examples.
- TUTORIALS AND FEEDBACK as good to fair.
- LABORATORIES mixed response. The ratings were:- Good 19%, Fair 21%, Poor 23%, V.Poor 26%. 31 students thought the lab work was well covered in lectures and that the out of class work associated with labs was not excessive.
- OTHER ASPECTS as fair.

Written Comments:Of the 43 students who completed the survey forms

- 13 found laboratories difficult due to poor lab equipment.
- 11 complained of demonstrators lack of knowledge of the equipment.
- 10 said that the material was well presented and easy to follow: Dr. Chu is a good lecturer.
- 5 said that the text books were inappropriate and too numerous.

6.303 High Frequency Circuits and Electronics (Devices Half) /Session One 1983

This subject was surveyed in week 13. Of the 55 students enrolled in this session, 36 returned forms to ELSOC. This represents a 65% response rate.

Comparative student ratings were:

- LECTURES : (Dr R.A. Zakeravicius) below average
- TUTORIALS : below average, students generally considered tutorial work worthwhile but complained about their organisation.
- LABORATORIES : average

- SUBJECT IN GENERAL : below average to average

- TEXTBOOKS : average

- ASSESSMENT METHOD : below average

Common Written Comments :

- Multiple choice questions should be abandoned in favour of long exam questions. (6)
- The quality of lecture notes (printed/written) were poor. (7)
- Criticism of general state of subject. (7)

Lecturer's Comment : Dr Zakeravicius has discussed these results with ELSOC. He would like the following comments of his to be on record:

1. It should be clearly understood that this evaluation only refers to the Devices half of 6.303.
2. This subject had two and a half times its expected enrolment this session. Accordingly some organisational problems did arise.
3. Dr Zakeravicius has some doubts as to the validity of the summarisation techniques used by ELSOC in compiling the subject summaries. His view is that the poor showing of 6.303 in this evaluation was not so much a result of the subject itself but is a result of how the data from his subject was analysed.

Note: ELSOC welcomes this type of comment. Through constructive criticism, not only subjects, but subject evaluations may be improved. ELSOC is examining Dr Zakeravicius' case and has yet to decide if our summarisation technique requires changing. (Note : Dr. Zakeravicius' comments eventually lead ELSOC to radically revise its summarisation techniques.)

ELSOC conducted another survey of 6.303 in session one 1984. However the devices half was surveyed too early for

students to make a meaningful evaluation. Hence the session one 1983 survey is the last valid survey for the devices half of this subject.

6.322 ELECTRONICS FOUR /Session Two 1983

This is a fourth year elective subject run for full time students in both sessions. There were 101 students enrolled, of which 72 students returned survey forms to ELSOC. 72/101 = 71%

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS and Dr. P.H. Ladbroke's LECTURES as high; LABORATORIES as very high; TUTORIALS and FEEDBACK as middle.

Many students wrote comments including a statement to the effect of "Good Subject, I enjoyed it." Some students felt that they needed more feedback on their progress in this subject: 7 requested either tutorials or tutorial problems; and 6 asked for a mid-session test.

6.323 COMMUNICATIONS IIA Mr. HOOPER/ Session One 1984

This is a fourth year professional elective. This subject was last surveyed by ELSOC in Session 1, 1983. Students then found the course interesting but demanding, the lecture rate was excessive, there were too many experiments and the tutorial problems were poorly chosen.

Of the 71 students enrolled in this session, 42 returned survey forms to ELSOC. This represented a 59% response rate. Students rated:

- LECTURES as good to fair. 34 students felt they could approach the lecturer with problems.
- TUTORIALS AND FEEDBACK as good to fair.
- LABORATORIES as good: 37 students said the laboratory classes were useful

- OTHER ASPECTS as good to fair.

Written Comments:Of the 42 students who completed the survey forms 6 complained that Mr Hooper was hard to follow, the material was unclear and that his speech was indistinct.

6.323 COMMUNICATIONS IIA Dr. RADZYNER/ Session One 1984

This is a fourth year professional elective. When last surveyed by ELSOC in Session 1, 1983 the students found all aspects of this subject below average, but they felt it was important in their future careers. Students generally thought the explanation of material by the lecturer wasn't very clear. Dr. Radzyner's reply to this was that he had expected too much of second and third year work to sink in.

Of the 71 students enrolled in this session, 32 returned survey forms to ELSOC. This represented a 45% response rate. Students rated:

- LECTURES: as mixed - 34% fair, 38% poor, 25% very poor.
- TUTORIALS AND FEEDBACK as fair to poor . 26 students thought that it was difficult to judge their progress in the subject and that they didn't get enough feedback.
- LABORATORIES as good to fair.
- OTHER ASPECTS as fair to poor.

Written Comments:Of the 32 students who completed the survey forms

22 students felt that the lecturer did not make good use of examples, that his material was not well organized, and that the lecturer spoke too quickly and indistinctly.
- 5 students agreed that the lecturer made an obvious attempt to improve his lecture material and tutorials after the mid-session discussion.

ELSOC discussed these results with Dr. Radzyner. He says that the raw results

show that, excepting lectures, students liked his subject. As too the lectures, he feels that only a minority of students had serious problems.

6.333

This subject will be surveyed in session two 1984.

6.402 BIOLOGY AND PHYSIOLOGY FOR ENGINEERS /Session One 1983

This is a third or fourth year elective subject. Of the 34 students enrolled in this session, 31 returned forms to ELSOC. This represents a 91% response rate.

Comparative student ratings were:

- LECTURES : (Dr B.W. Celler) average but lecturer spoke too fast or indistinctly and covered too much material in each lecture. 100% of students felt they could approach lecturers with their problems.
- TUTORIALS : average
- LABORATORIES : average
- SUBJECT IN GENERAL: average
- TEXTBOOKS : average
- ASSESSMENT METHOD: average

Common Written Comments :

- Printed lecture notes should be issued prior to actual lecture. (4)
- An extensive course for the time allocated. (4)

6.412 SYSTEMS AND CONTROL II/Session One 1984

This is a fourth year professional elective. It was last surveyed in session one 1983 when students reported numerous problems. These all were the result of the regular lecturer being absent and a team of 3 lecturers running the subject.

It was surveyed in Session One, 1984. Of the 13 students enrolled in this session, 12 returned survey forms to ELSOC. This represented a 92% response rate. Students rated:

- LECTURES(Dr.K.C.Daly) as good. All students surveyed thought attendance at lectures was worthwhile.
- TUTORIALS AND FEEDBACK as good to fair.
- LABORATORIES as good, although 8 students agreed it was hard to finish the lab work in the required time.
- OTHER ASPECTS as good to fair. 10 students were satisfied with the workload in this subject.

Of the 12 students who completed the survey forms there were no common written comments.

6.413 DIGITAL CONTROL/ Session Two 1983

This is a fourth year elective subject run in second session for full-time students. 27 of the 35 enrolled students completed forms (27/35 = 63%).

Compared with every other subject surveyed, students rated this subject's GENERAL ASPECTS as middle; Dr. D. Williamson's LECTURES as high; LABORATORIES as middle, although 19 students said it was hard to finish the experiments in the allotted time; TUTORIALS and FEEDBACK as very high.

Of the 27 students who completed survey forms, four said the lecturer was very capable, well organised and could explain problems clearly.

6.432 Computer Control and Instrumentation /Session One 1983

This subject was surveyed in week 13. Of the 90 students enrolled in this session, 68 returned forms to ELSOC.

Comparative student ratings were:

- LECTURES : (Dr D.H. Mee) Generally above average but there was too much material covered in each lecture.
- TUTORIALS : Students felt that they didn't get enough feedback on their problems.
- LABORATORIES : Below average, but felt that labs were of value.
- SUBJECT IN GENERAL : average
- TEXTBOOKS : average
- ASSESSMENT METHOD : average

Common Written Comments :

- Higher percentage should be given to main project and less on exam. (8)
- Three or four texts, which only covered small part of course should be changed to one book which covers the whole course. (7)
- Increase the number of lab demonstrators. (11)
- Complaints concerning the lack of laboratory facilities (in particular the development stations) making project work hard. (11)
- Lab work ahead of lecture material. (6)

6.483 BIOMEDICAL ENGINEERING/ Session Two 1983

This is a fourth year elective subject run for full time students in session two. 16 out of 17 students enrolled returned survey forms to ELSOC. 16/17=94%

Compared with every other subject surveyed students rated this subject's GENERAL ASPECTS and Dr. P.T. Bason's LECTURES as high; LABORATORIES as middle; TUTORIALS and FEEDBACK as low, although all surveyed students always or usually attended tutorials.

Of the 16 survey forms returned to ELSOC, 4 students complained that the contribution to the final assessment from the final test was too high.

6.512 SEMICONDUCTOR DEVICES /Session One 1983

This is a fourth year elective subject. Of the 22 students enrolled in this session, 18 returned forms to ELSOC.

Comparative student ratings were:

- LECTURES : (Dr M.A. Green) average
- TUTORIALS : above average
- LABORATORIES : average
- SUBJECT IN GENERAL : average
- TEXTBOOKS : average
- ASSESSMENT METHOD : average

Common Written Comments : none

6.522 TRANSISTOR AND INTEGRATED CIRCUITS/Session One 1984

This is a fourth year professional elective. It is a new subject.

Of the 32 students enrolled in this session, 24 returned survey forms to ELSOC. This represented a 75% response rate. Students rated:

- LECTURES(Prof.G.A.Rigby) as good. 22 students thought attendance at lectures was worthwhile.
- TUTORIALS AND FEEDBACK as fair.
- LABORATORIES varyingly from good to very poor.
- OTHER ASPECTS as good to fair.

Written Comments:Of the 24 students who completed the survey forms

- 5 requested tutorials.
- 4 complained that the laboratories were not well organised.

6.532 INTEGRATED DIGITAL SYSTEMS/Session One 1984

This is a fourth year professional elective. It is a new subject.

Of the 28 students enrolled in this session, 16 returned survey forms to ELSOC. This represented a 57% response rate. Students rated:

- LECTURES(Dr.P.C.Maxwell) as very good to good.
- TUTORIALS AND FEEDBACK as good to fair.

- OTHER ASPECTS as good. 14 students said they enjoyed the subject, but 13 students thought the workload associated with the subject was excessive.

Written Comments:Of the 16 students who completed the survey forms

- 9 complained that they had to spend too much time on project assignments.
- 8 complained about overloaded computing facilities (especially plotters).
- 4 praised the lectures and found the subject interesting.

ELSOC would like to congratulate Dr. Maxwell on receiving one of the highest lecture ratings in the session one, 1984 surveys.

6.611 COMPUTING 1/ Session Two 1983

This is a first year core subject which is run in second session for full time students of Electrical Engineering and as a service subject for various Science courses. 136 of the 218 students enrolled returned survey forms (62.4%).

Compared with every other subject surveyed students rated this subject's GENERAL ASPECTS as very low; Dr. J. D. Newmarch's LECTURES, ASSIGNMENTS,

TUTORIALS and FEEDBACK as low.

14 students complained that the assignments were too hard and too long, 10 students complained that the computer (elecvox) was down too much, 8 students complained that the terminal tests were too hard, 6 complained about the method of assessment. {{ Deletion }} 5 students advise other students about to do this subject to have some previous knowledge of computer programming and 4 students mentioned that Jan Newmarch needs a hair-cut (his hair gets in the way of the overhead projector).

{{ Deletion }}

ELSOC notes that 6.611 is a first year compulsory subject with large lecture classes and is a service subject to other schools. Also it is the first taste some people have of programming (which can be somewhat traumatic). These factors mean that a low student rating should be routinely expected.

6.622 COMPUTER APPLICATIONS AND SOFTWARE / Session One 1983

This is a fourth year professional elective.

Of the 42 students enrolled this session, 32 returned survey forms to ELSOC. This represented a 72% response rate. Students rated:

- LECTURES (Dr R.A. Sammut) as above average but the lecturer didn't allow enough time for students to copy notes.
- TUTORIALS as average to above average.
- SUBJECT IN GENERAL as average to above average, but students doubted if this subject was relevant to their future career.
- TEXTBOOKS as average.
- ASSESMENT METHOD as not clearly specified at the beginning of session, but satisfaction with method used was expressed.

Common written comments :

- Dr Sammut is a good lecturer. (7)

6.672 OPERATING SYSTEMS AND COMPILERS/Session One 1984

This is a fourth year professional elective. It has not been previously surveyed by ELSOC

Of the 14 students enrolled in this session, 11 returned survey forms to ELSOC. This represents a 79% response rate. Students rated:

- LECTURES(Dr.A.J.Gerber) as very good to good. 10 students thought the lecturer's material was well organised and attendance at lectures was worthwhile.
- TUTORIALS AND FEEDBACK as good to fair although all students agreed that there wasn't sufficient time to ask questions.
- OTHER ASPECTS as good. 10 students said they enjoyed this subject, and that the textbooks were useful and comprehensive.

Written Comments:Of the 14 students who completed survey forms 4 praised the lecturer.

ELSOC would like to congratulate Dr.Gerber on receiving one of the highest lecturer ratings in the session one, 1984 surveys.

Dr. Gerber comments :

1. I'd agree with the summary on the whole, except tutorial attendance was so poor (on the whole) that I don't think the comment "there wasn't sufficient time to ask questions" is justified. I believe that the class was given adequate warning of the magnitude & difficulty of the assignments & that most of them (for one reason or another) did not heed that warning. Anyway, they all passed.

2. I do agree that the assignment workload was excessive, however don't think I had time to adequately prepare for the subject. I didn't know that I was doing it till mid-January, since I was only on a one year contract (this is where I've resigned from UNSW). If I were taking the subject again, I'd certainly make the workload lighter. I would also make some other changes to the course content, but none of the students seem to have worried about this.

3. I can't agree with the person who commented to the effect that "the lexical analyser assignment is not needed" - I think this is a remark which betrays that students lack of understanding.

I have left these comments with Phil McCrea, who will hopefully pass them on to the next person who takes this subject, if it ever runs again.

Ho hum. I think it is most important however that whoever does take the course in future is more than likely to change it substantially.

10.033 ELECTRICAL ENGINEERING MATHS III, Session Two 1983

This is a third year core subject run for full time students over the whole year. The session two part alone was surveyed in October 1983. 135 students returned forms to ELSOC; there were 185 students enrolled in the subject. 135/185=73%

Compared with every other subject surveyed, students rated EVERY ASPECT of this subject as in the middle.

Of the 135 students who returned forms, 10 wrote that the work involved with the second assignment was excessive. About 20 students commented on the lecturer's use of drawings and cartoons: 7 reacting negatively (writing: "pornographic", "disgusting", ...etc.) and the rest favourably. 9

students wrote that Mr. Mustard's lectures were "good" to "excellent" although 12 would have liked more worked examples in them.

Mr. Mustard comments : This subject is quite demanding of students in its scope, its level of intellectual difficulty and in the quantity of work that must be done. Every topic in it is specially relevant to the practising modern Electrical Engineer and is often used in other E.E. subjects or projects in the sessions immediately after it is taught. The 1983 students were a pleasure to teach, being (on the whole!) cheerful, attentive, and forthcoming with intelligent questions and attaining a record pass rate of about 90%. The ELSOC survey has been most useful in pinpointing several aspects of the course and its teaching that need attention. The second assignment was rather too long and in 1984 the corresponding assignment will be shorter and count relatively more in assessment. The drawings that seemed to disturb a few students were mostly by the famous Alexander Calder (inventor of "mobile" sculptures) and were from his illustrations to children's nursery rhymes (after all I didn't want to overestimate the maturity of 3rd year Elec. Eng. students !). More worked examples would always be welcomed and it is difficult to strike a good balance ; however students will find that for each and every mathematical method introduced in the course there was at least one fully worked out example given in lectures, the tutorials, or the supplementary printed notes distributed. I look forward to 1984 !

10.033 ELECTRICAL ENGINEERING III /Session One 1984

This is a compulsory third year service subject run by the School Of Mathematics. The session one component of this subject has not been previously surveyed by ELSOC.

Of the 150 students enrolled in this session, 114 returned survey forms to ELSOC. This represented a 76% response

rate. Students rated:

- LECTURES(Mr.D.Mustard) as poor. 83 students felt the lecturer didn't make good use of examples.
- TUTORIALS AND FEEDBACK as Good 26%, Fair 32%, Poor 23%.
- OTHER ASPECTS as poor to fair. 89 students said that they didn't enjoy this subject, and 87 thought that the texts were not useful and not comprehensive.

Written Comments:Of the 150 students who completed the survey forms

- 23 said the lectures were too theoretical or contained insufficient worked examples.
- 9 suggested that a complete set of tutorial solutions would be useful
- 8 said the lecturer didn't stress the important or relevant points
- 7 said the assignments were too hard or long or involved tedious calculation
- 6 said the lecturer was unapproachable or was uncivil to students who came late.
- 5 said the lectures were badly organized
- 5 said the test was too hard or too long.
- 5 suggested that more tutorials would be useful.

Mr. Mustard comments : Well, my stocks certainly plummeted from their 1983 level! Let's face it: this is a very tough course but all of it is highly relevant to the modern Electrical Engineer -as both assignments were meant to show. On the whole students did quite well :more than 70% getting a clear pass in session one and 18% getting distinctions or high distinctions. Counting up I find that 40 worked examples were done in lectures and solutions to 80 were put into the Maths library. I'll increase this in 1985 and relegate some of the theoretical detail to the supplementary notes. The detailed syllabus contained page-by-page references to 11 books kept

for students in Open Reserve. Library records suggest that perhaps no more than 10 students attempted to consult any of them. From 1985 the subject will be divided into two separate subjects and students will have to pass each one of them.

10.361 STATISTICS SE/Session One 1984

This is a compulsory third year subject. It has not been previously surveyed by ELSOC.

Of the 136 students enrolled, 79 returned survey forms to ELSOC. This represented a 58% response rate. Students rated:

- LECTURES (Prof. A.M.Hasofer) were rated as fair to poor. 56 students thought the lecturer didn't make good use of examples and that the lecturer's material was not well organised.
- TUTORIALS AND FEEDBACK were good to fair.
- OTHER ASPECTS were fair.

Written Comments:Of the 79 students who completed the survey forms

- 29 complained that lectures weren't well organised, lacked coherence, were hard to hear, hard to read and any examples given were poor.
- 9 students had problems with APL